IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Pearce et al.	)
		)
For:	Mitigating Errors in a	)
	Distributed Speech	)
	Recognition Process	)
		)
Serial No.:	09/830,306	)
		)
Filed:	April 25, 2001	)
		)
Examiner:	Wozniak, J.	)
		)
Art Unit:	2626	)
		)
Appeal No.:	2008-5318	)

Mail Stop 8
Director of the U.S. Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

Attention: Office of the Solicitor

NOTICE AND REASONS FOR APPEAL TO THE U.S. COURT OF

APPEALS FOR THE FEDERAL CIRCUIT (EX PARTE)

Appellants hereby provide Notice and Reasons for Appeal to the U.S.

Court of Appeals for the Federal Circuit from the decision of the Board of Patent

Appeals and Interferences, dated May 7, 2009, and from the decision on the

Request for Rehearing, dated July 29, 2009. The request is relevant to Pearce et al.,

US Application Serial No. 09/830,306, filed April 25, 2001, and relates to Appeal

No. 2008-5318.

The appellants in this appeal are:

David John Benjamin Pearce, and Jonathan Alastair Gibbs.

The appellants reasons for appeal are as follows:

In the decision in the request for rehearing from the decision of the

Board of Appeal and Interference, it is believed that the board inappropriately

limited the decision in the request for rehearing to a subset of the claims, where the

board alleged that the request for rehearing was limited only to claims 1, 11-13 and

23-26.

The appellants would alternatively contend that the request for

rehearing expressly indicated that the request extended to all appealed claims.

Where at page 1, lines 2 to 4, of the request for rehearing, the request noted a desire

for the board to "reconsider the portion of the decision related to claims 1, 13, 25

and 26 (which indirectly affects all of the other appealed claims), and the portion of

the decision related to claims 11, 12, 23 and 24". Additionally, the appellants

further expressly noted the claims for which rehearing was being requested at page

5, lines 12 to 14, where the appellant specifically requested that "given the above

analysis, it would further appear appropriate that the Examiner's decision to finally reject claims 1, 3, 4, 6, 7, 11-13, 15, 16, 18, 19 and 23-26, should be reversed". As such, the request for rehearing clearly identified all of the claims which were the subject of the appeal as being the subject of the rehearing, and the request for rehearing was not limited to a subset of the same as alleged by the board in their rehearing decision.

Furthermore, there is no requirement to formally present a request for rehearing in a manner which expressly requests rehearing relative to each and every claim, only a requirement to address each of the points believed to be misapprehended or overlooked in rendering the decision. In the context of the present decision, even if it could be said that the appellants failed to expressly identify all of the claims relative to the request for rehearing, given the manner in which the board's opinion was structured and the manner in which the analysis was linked to the claims, a decision on rehearing that overturned the earlier decision with respect to claims 1, 13, 25 and 26, would necessarily apply to the other appealed claims.

As part of requesting reconsideration, the applicants expressly addressed the Examiner's single line of reasoning, which was relied upon by the board in rejecting not only claims 1, 13, 25 and 26, but also claims 3, 4, 6, 7, 15, 16,

18 and 19. Furthermore, the Board's decision on rehearing has indicated that the appellants were persuasive relative to the point addressed. If the board's analysis and reasoning relative to claims 1, 13, 25 and 26, which was the basis for affirming the Examiner was found to be no longer valid, then there exists no further articulated basis upon which claims 3, 4, 6, 7, 15, 16, 18 and 19, can continue to be rejected. As such the decision of the Board to maintain the rejection of claims 3, 4, 6, 7, 15, 16, 18 and 19, can not be supported based upon the record when viewed in its entirety.

Simultaneously herewith, a copy of this notice of appeal together with the fee prescribed by Rule 52 of the rules of the Federal Circuit are being transmitted to the clerk of the Federal Circuit.

Respectfully submitted,

BY: _Lawrence Chapa_

Lawrence J. Chapa
Reg. No. 39,135
Phone No.: (847) 523-0340
Facsimile No.: (847) 523-2350

Motorola, Inc.
Mobile Devices
Intellectual Property Department
600 North US Highway 45, W4 35Q
Libertyville, IL 60048

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Pearce et al.	)
		)
For:	Mitigating Errors in a	)
	Distributed Speech	)
	Recognition Process	)
		)
Serial No.:	09/830,306	)
		)
Filed:	April 25, 2001	)
		)
Examiner:	Wozniak, J.	)
		)
Art Unit:	2626	)
		)
Appeal No.: 2008-5318		)

Mail Stop 8
Director of the U.S. Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

Attention: Office of the Solicitor

CERTIFICATE OF EXPRESS MAILING

I certify that the attached Notice and Reasons for Appeal to the U.S.

Court of Appeals for the Federal Circuit (Ex Parte) is being deposited on Friday,

September 25, 2009, postage prepaid, as Express Mail having the mailing label

number ET 346061812 US with the United States Postal Service addressed to:

- 1 -

Mail Stop 8
Director of the U.S. Patent and Trademark Office.
P.O. Box 1450
Alexandria, VA 22313-1450

BY: _Lawrence Chapa_

Lawrence J. Chapa

Date: _September 25, 2009_

UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/830.306	04/25/2001	David John Benjamin Pearce	CM00620P	6704

7590 05/07/2009
Jonathan P Meyer
Motorola Inc
1303 East Algonquin Road
Schaumburg, IL 60196

EXAMINER
WOZNIAK, JAMES S

ART UNIT	PAPER NUMBER
2626	

MAIL DATE	DELIVERY MODE
05/07/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

UNITED STATES PATENT AND TRADEMARK OFFICE

_____

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

_____

Ex parte DAVID JOHN BENJAMIN PEARCE and
JON ALASTAIR GIBBS

_____

Appeal 2008-5318
Application 09/830,306
Technology Center 2600

_____

Decided:[1] May 7, 2009

_____

Before KENNETH W. HAIRSTON, CARLA M. KRIVAK, and
KARL D. EASTHOM, *Administrative Patent Judges*.

HAIRSTON, *Administrative Patent Judge*.

DECISION ON APPEAL

---

[1] The two-month time period for filing an appeal or commencing a civil
action, as recited in 37 CFR § 1.403, begins to run from the decided dated
shown on this page of the decision. The time period does not run from the
Mail Date (paper delivery) or Notification Date (electronic delivery).

Appellants appeal under 35 U.S.C. § 134 from a final rejection of claims 1, 3, 4, 6, 7, 11 to 13, 15, 16, 18, 19, and 23 to 26. We have jurisdiction under 35 U.S.C. § 6(b).

We will sustain the obviousness rejections.

Appellants' invention is concerned with mitigating transmission errors in a distributed speech recognition method and system by replacing one or more speech recognition parameters in an identified group of vectors that have a transmission error with corresponding copies of one or more corresponding speech recognition parameters from a different vector (Figs. 1 and 2; Spec. 9 to 11).

Claim 1 is representative of the claims on appeal, and it reads as follows:

1. A method of mitigating errors in a distributed speech recognition process, the distributed speech recognition process being one in which speech recognition parameters are arranged in vectors, each vector corresponding to a particular sampling time-frame, and said speech recognition parameters are received at a second location having been transmitted from a first location;

the method comprising the steps of:

identifying a group comprising one or more of said vectors which have undergone a transmission error; and

replacing one or more speech recognition parameters in the identified group of vectors, wherein said one or more speech recognition parameters in said identified group of vectors are replaced by respective replacement parameters corresponding to copies of one or more corresponding speech recognition parameters from a different vector, corresponding to a different

particular sampling time frame, received without error after said identified group of vectors.

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

Ozawa	US 5,305,332	Apr. 19, 1994
Jeon	US 5,673,363	Sep. 30, 1997
Yeldener	US 5,774,837	Jun. 30, 1998
Jacobs	US 5,956,683	Sep. 21, 1999

The Examiner rejected claims 1, 3, 13, 15, 25, and 26 under 35 U.S.C. § 103(a) based upon the teachings of Jacobs and Jeon.

The Examiner rejected claims 4 and 16 under 35 U.S.C. § 103(a) based upon the teachings of Jacobs, Jeon, and Ozawa.

The Examiner rejected claims 6, 7, 11, 12, 18, 19, 23, and 24 under 35 U.S.C. § 103(a) based upon the teachings of Jacobs, Jeon, and Yeldener.

Appellants and the Examiner agree that Jacobs does not provide any type of transmission error correction (Br. 6; Ans. 4). Appellants argue *inter alia* (Br. 6 to 8) that the applied references do not teach replacing one or more speech recognition parameters or the entire vector that has undergone a transmission error with copies of one or more corresponding speech recognition parameters.

ISSUE

Have Appellants demonstrated that the Examiner erred by finding that the reference to Jeon teaches replacing one or more speech recognition parameters or the entire vector that has undergone a transmission error with copies of one or more corresponding speech recognition parameters?

3

FINDINGS OF FACT

1. The transmission error mitigation performed by Appellants replaces speech recognition parameters in a vector (e.g., vector 133) with corresponding speech recognition parameters from a different vector (e.g., vector 134, *see* Fig. 1).

2. Jacobs describes a distributed speech recognition process in which speech recognition parameters are arranged in vectors, and each vector corresponds to a particular sampling time frame (Fig. 2; Abstract; col. 1, ll. 22 to 29).

3. In the preferred embodiment of Jeon, an error in a segment of a frame is concealed by taking an adjacent segment from another frame and multiplying the adjacent segment by a weight value to obtain a coefficient for the erroneous segment (Fig. 6A; col. 4, l. 62 to col. 5, l. 18).

4. In the admitted prior art of Jeon, a frame with erroneous segment(s) is replaced *in toto* with the contents of a buffered error-free frame (Figs. 3 and 4A; col. 1, ll. 5 to 12; col. 1, l. 59 to col. 2, l. 31).

PRINCIPLES OF LAW

"[I]f a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill." *KSR Int'l Co. v. Teleflex Inc.,* 550 U.S. 398, 417 (2007).

ANALYSIS

Claims 1, 13, 25, and 26

Inasmuch as the preferred embodiment in Jeon conceals an error in a segment of a frame by taking an adjacent segment from another frame and

multiplying the adjacent segment by a weight value to obtain a coefficient for the erroneous segment, we agree with Appellants' argument that such an error concealment technique does not teach replacing one or more speech recognition parameters or the entire vector that has undergone a transmission error with *copies* of one or more *corresponding* speech recognition parameters. As seen in Figure 6A of the preferred embodiment in Jeon (FF3), the adjacent segment S_m from frame F_1 is not a *corresponding copy* of erroneous segment S_1 from frame F_2. On the other hand, the admitted prior art in Figures 3 and 4A of Jeon (FF4) describes the replacement *in toto* of a frame F_2 with erroneous segment(s) with another frame from buffer 40. Thus, the admitted prior art portion of Jeon teaches replacing one or more speech recognition parameters or the *entire* vector that has undergone a transmission error with *copies of one or more corresponding* speech recognition parameters as set forth in claims 1, 13, 25, and 26 on appeal. In the absence of other arguments by Appellants, we find that it would have been manifestly obvious to one of ordinary skill in the art to use the error mitigation technique described by the admitted prior art in Jeon to improve the distributed speech recognition process described by Jacobs (FF2). *See KSR*, 550 U.S. at 417.

Claims 3 and 15

Appellants' arguments (Br. 8) for claims 3 and 15 mirror the arguments presented for claims 1, 13, 25, and 26. Accordingly, Appellants' arguments do not demonstrate the nonobviousness of the claimed subject matter set forth in these claims.

Claims 4 and 16

Appellants have chosen to let these claims stand or fall with claims 3 and 15 (Br. 9). As indicated *supra*, Appellants' arguments were not convincing of the nonobviousness of the claimed subject matter set forth in claims 3 and 15.

Claims 6, 7, 18, and 19

Appellants have chosen to let these claims stand or fall with claims 1 and 13 (Br. 9). As indicated *supra*, Appellants' argument were not convincing of the nonobviousness of the claimed subject matter set forth in claims 1 and 13.

Claims 11, 12, 23, and 24

Appellants' arguments (Br. 9) fail to address the Examiner's contention that it would have been obvious to the skilled artisan to apply the teachings of Yeldener to the teachings of Jacobs and Jeon. Accordingly, Appellants' arguments do not overcome the Examiner's prima facie case of obviousness.

CONCLUSION OF LAW

Appellants have not demonstrated that the Examiner erred by finding that the applied references teach replacing one or more speech recognition parameters or the entire vector that has undergone a transmission error with copies of one or more corresponding speech recognition parameters.

ORDER

The Examiner's obviousness rejections of claims 1, 3, 4, 6, 7, 11 to 13, 15, 16, 18, 19, and 23 to 26 are affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a)(1)(iv).

AFFIRMED

ELD

JONATHAN P MEYER
MOTOROLA INC
1303 EAST ALGONQUIN ROAD
SCHAUMBURG, IL 60196

UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/830,306	04/25/2001	David John Benjamin Pearce	CM00620P	6704

7590   07/29/2009

Jonathan P Meyer
Motorola Inc
1303 East Algonquin Road
Schaumburg, IL 60196

EXAMINER
WOZNIAK, JAMES S

ART UNIT	PAPER NUMBER
2626	

MAIL DATE	DELIVERY MODE
07/29/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

UNITED STATES PATENT AND TRADEMARK OFFICE

_____

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

_____

Ex parte DAVID JOHN BENJAMIN PEARCE
and JON ALASTAIR GIBBS

_____

Appeal 2008-005318
Application 09/830,306
Technology Center 2600

_____

Decided:[1] July 29, 2009

_____

Before KENNETH W. HAIRSTON, CARLA M. KRIVAK
and KARL D. EASTHOM, *Administrative Patent Judges.*

HAIRSTON, *Administrative Patent Judge.*

DECISION ON REQUEST FOR REHEARING

In a Decision mailed May 7, 2009, the Board affirmed the Examiner's

obviousness rejections of claims 1, 3, 4, 6, 7, 11 to 13, 15, 16, 18, 19, and 23

_____

[1] The two-month time period for filing an appeal or commencing a civil
action, as recited in 37 C.F.R. § 1.304, begins to run from the decided date
shown on this page of the decision. The time period does not run from the
Mail Date (paper deliver) or Notification Date (electronic delivery).

to 26. Appellants have requested a rehearing of our decision to affirm the obviousness rejections of claims 1, 11 to 13, and 23 to 26 (Req. Reh'g. 1, 5). Appellants have not requested a rehearing of our decision to affirm the obviousness rejections of claims 3, 4, 6, 7, 15, 16, 18, and 19.

In the decision, we agreed with Appellants' argument that the error concealment technique described in the preferred embodiment (e.g., Fig 6A) in Jeon "does not teach replacing one or more speech recognition parameters or the entire vector that has undergone a transmission error with *copies* of one or more *corresponding* speech recognition parameters" (Dec. 5). In response to Appellants' argument (Br. 6 to 8) that the applied references do not teach replacing one or more speech recognition parameters or the entire vector that has undergone a transmission error with copies of one or more corresponding speech recognition parameters, the Board stated (FF 4) that "[i]n the admitted prior art of Jeon, a frame with erroneous segment(s) is replaced *in toto* with the contents of a buffered error-free frame (Figs. 3 and 4A; col. 1, ll. 5 to 12; col. 1, l. 59 to col. 2, l. 31)" (Dec. 4). Based upon this teaching in Jeon, the Board affirmed the obviousness rejections of all of the claims on appeal.

Appellants argue (Req. Reh'g. 2) that the Board's reliance on the admitted prior art in Jeon is tantamount to a new ground of rejection, and that the Board should now grant Appellants' "request that the application be reheard under §41.52 by the Board of Patent Appeals and Interferences upon the same record, addressing the new grounds for rejection, stating with particularity the points believed to have been misapprehended or overlooked in rendering the decision (see 37 CFR 41.50(b)(1) and (2))." Inasmuch as

the Board relied on a portion of Jeon that was not relied on by the Examiner, Appellants' request for a rehearing is reasonable, and it is hereby granted.

Appellants now argue (Req. Reh'g. 3 and 4) that "the relied upon technique [in the admitted prior art portion of Jeon] involves the use of a replacement decoded signal received without error prior to the portion that was received with error, as opposed to a replacement portion that was received 'after said identified group of vectors'" as set forth in claims 1 and 13 on appeal. We agree with Appellants' argument that claims 1 and 13 use as a replacement one or more corresponding speech recognition parameters from a different vector received without error *after* the identified group of vectors with a transmission error is identified, whereas the admitted prior art in Jeon (col. 2, ll. 28 to 31) uses as a replacement one or more corresponding parameters from a different vector received without error *before* the identified group of vectors with a transmission error is identified.

In summary, the obviousness rejection of claims 1 and 13 based upon the teachings of Jacobs and Jeon can not be maintained in light of Appellants' convincing argument. In view of the argument presented for claims 1 and 13, and additional arguments presented by Appellants for claims 11, 12, and 23 to 26, the obviousness rejections of claims 11, 12, and 23 to 26 can not be maintained. On the other hand, the obviousness rejections of claims 3, 4, 6, 7, 15, 16, 18, and 19 are maintained in view of the fact that they are not listed in the request for rehearing.

As indicated *supra*, Appellants' request for a rehearing of our decision has been granted, and our decision should be modified to reflect our agreement with Appellants' arguments concerning claims 1, 11 to 13, and 23

3

to 26. Thus, our affirmance of the Examiner's obviousness rejections of claims 1, 11 to 13, and 23 to 26 is hereby withdrawn, and the decision of the Board should be changed to affirmed-in-part.

REHEARING
GRANTED

KIS

Jonathan P. Meyer
Motorola Inc.
1303 East Algonquin Road
Schaumburg, IL 60196